

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A field emission device comprising:

a cathode on which ~~a plurality of~~ one or more carbon nanotube (CNT) ~~emitters~~ are arranged;

a gate insulating layer having ~~[[a]]~~ one or more through ~~[[hole]]~~ holes through which electrons emitted from the CNT emitters pass, each of the through holes having a generally circular cylindrical shape; and

a gate electrode having an elongated-oval shaped gate hole that ~~which~~ corresponds to the through ~~[[hole]]~~ holes of the gate insulating layer and ~~has an elongated gate hole~~ that forms an electric field having different strengths in a first direction and in a second direction orthogonal to the first direction,

whereby the electrons emitted by each of the CNT emitters make an asymmetrically elongated beam spot.

2. (Canceled)

3. (Currently Amended) The device of claim 1, wherein at least two CNT emitters are disposed side by side and correspond to ~~one of the asymmetric gate holes~~ the gate hole.

4. (Canceled)

5. (Currently Amended) The device of claim 3, wherein the two CNT emitters have a half-circle or crescent shape.

6. (Currently Amended) A field emission device comprising:
a plurality of parallel cathodes that extend in a first direction;
a plurality of parallel gate electrodes which extend in a second direction orthogonal to the first direction and have ~~enlongated~~ elongated-oval shaped gate holes formed where the cathodes overlap ~~that form~~, each of the gate holes forming an electric field with ~~difference~~ different strengths in the first and second directions;
a plurality of carbon nanotube (CNT) [[CNT]] emitters ~~which correspond to the gate holes and are~~ formed on the cathodes, each of the gate holes corresponding to one or more of the CNT emitters; and
a gate insulating layer interposed between the cathodes and the gate electrodes and having through holes through which electrons emitted from the CNT emitters pass, the through holes having a generally circular cylindrical shape,
whereby the electrons emitted by each of the CNT emitters make an asymmetrically elongated beam spot.

7. (Canceled)

8. (Currently Amended) The device of claim ~~[[7]]~~ 6, wherein the gate holes are ~~enlongated~~ elongated in the second direction.

9. (Currently Amended) The device of claim 6, wherein the two CNT emitters are disposed side by side and correspond to one of the ~~asymmetric~~ gate holes.

10. (Canceled)

11. (Currently Amended) The device of claim 8, wherein the two CNT emitters are disposed side by side and correspond to one of the ~~asymmetric~~ gate holes.

12. (Currently Amended) The device of claim ~~[[3]]~~ 9, wherein the two CNT emitters have a half-circle or crescent shape.

13. (Currently Amended) The device of claim ~~[[4]]~~ 11, wherein the two CNT emitters have a half-circle or crescent shape.

14. (Currently Amended) A field emission device comprising:
a plurality of parallel cathodes that extend in a first direction;
a plurality of carbon nanotube (CNT) emitters formed on the cathodes;
a plurality of parallel first gate electrodes which extend in a second direction orthogonal to the first direction and have ~~[[a]]~~ first gate holes formed where the cathodes overlap, each of the first gate holes corresponding to one or more of the CNT emitters;

a first gate insulating layer ~~in which first through holes that correspond to the first gate holes~~ being formed between the cathodes and the first gate electrodes ~~are~~

~~formed~~ and having first through holes that correspond to the first gate holes and have a generally circular cylindrical shape;

a second gate insulating layer ~~in which second through holes that correspond to the first gate holes are formed~~ being formed on the first gate electrodes and having second through holes, each of the second through holes corresponding to one or more of the first gate holes and having an elongated-oval shape; and

a second gate electrode which is formed on the second gate insulating layer and ~~in which elongated gate holes that form an electric field having different strengths in the first and second directions is formed~~ has elongated-oval shaped second gate holes, each of the second gate holes forming an electric field that has different strengths in the first and second directions.

15. (Currently Amended) The device of claim 14, wherein each of the first gate holes has an ~~enlongated~~ elongated-oval shape.

16. (Currently Amended) The device of claim 15, wherein the first and second gate holes are ~~enlongated~~ elongated in the second direction.

17. (Currently Amended) The device of claim 14, wherein at least two CNT emitters are disposed side by side and correspond to one of the ~~asymmetric~~ second gate holes.

18. (Currently Amended) The device of claim 15, wherein at least two CNT emitters are disposed side by side and correspond to one of the ~~asymmetric~~ second gate holes.

19. (Currently Amended) The device of claim 16, wherein at least two CNT emitters are disposed side by side and correspond to one of the ~~asymmetric~~ second gate holes.

20. (Currently Amended) The device of claim 17, wherein the two CNT emitters have a half-circle or crescent shape.

21. (Currently Amended) The device of claim 18, wherein the two CNT emitters have a half-circle or crescent shape.

22. (Currently Amended) The device of claim 19, wherein the two CNT emitters have a half-circle or crescent shape.